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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,769	10/12/2004	Frederic Pierron	TFR0137	3572

7590 10/03/2005

Valeo Climate Control Corp.  
4100 North Atlantic Boulevard  
Auburn Hills, MI 48326

EXAMINER
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PATEL, VINOD D

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/510,769

Applicant(s)

PIERRON ET AL.

Examiner

Vinod D. Patel

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 and 6-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2004 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED OFFICE ACTION

### INTRODUCTION

1. This application/control number 10/510769 has been examined. This is the first action on the merits of the claimed invention. The application has claims 1-42 pending.

#### *Claim Objections*

2. Claims 7-8 and 10-42 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only--, and/or, --cannot depend from any other multiple dependent claim--. See MPEP § 608.01(n). Accordingly, the claims 7-8 and 10-42 have not been further treated on the merits.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springer, Jr. (US5831244) in view of Clement (US3852568).

Springer, Jr. discloses an electric heating device comprising an electric radiator (20) for heating the air passing through it, said radiator comprising a casing (Fig. 2), at least one resistive element mounted in the casing and constituted by at least one zigzag metal strip (24) which is disposed so as to be directly exposed to the air passing through the casing, and a circuit (30) for controlling the electrical supply of the resistive element or elements connected to a power supply, characterised in that the electric radiator (20) comprises a set of individual

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heating modules disposed parallel to one another in the casing (10) and so as to be directly exposed to the air passing through the casing, each heating module comprising a metal strip (24) and an electronic switch (28) controlled by the control circuit (30) intended to selectively inhibit the electrical supply of the metal strip (24), the heating module also comprises an electrically insulating support (Fig. 2) comprising a moulded rail (22) intended to accommodate and hold in position said metal strip (24).

Spring, Jr. is silent regarding metal strip pleated or corrugated.

Clement discloses a corrugated metal strip heating element (10) establishing wavy or serpentine pattern (column 1, lines 40-45) to provide a high surface area for efficient heating in moving air system (column 1, lines 19-25).

It would have been obvious to one of ordinary skill in the art at the time of invention to use corrugated metal strip heating element as taught by Clement for the electric heating device of Spring, Jr. to provide a high surface area for efficient heating of the air resulting in the comfort of occupant in a vehicle.

***Allowable Subject Matter***

5. Claims 3, 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited art when responding to this action. Hill (US4232211), Nakgawa et al. (US4562957), Curhan et al. (US5187349), Yeh (5192853), Single, II (US5279459), Sarbach

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(US5571432), Kreamer (US5667710), Tamada (US6002105), Umebayhi et al. (US6265692), Beetz et al. (US6392207) relate to heating devices.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod D. Patel whose telephone number is 571-272-4785. The examiner can normally be reached on 7.30 A.M. TO 4.00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

  
Vinod Patel  
Patent Examiner  
Art Unit 3742

  
THORS CAMPBELL  
PRIMARY EXAMINER